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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,325

02/23/2004

Wei Du

HDM-4

8714

7590 12/01/2009  
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EXAMINER

COSIMANO, EDWARD R

ART UNIT

PAPER NUMBER

2863

MAIL DATE

DELIVERY MODE

12/01/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/784,325	<b>Applicant(s)</b> DU, WEI	
	<b>Examiner</b> Edward R. Cosimano	<b>Art Unit</b> 2863	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-39 is/are allowed.
- 6) ☒ Claim(s) 1-22 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2009 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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1. EXAMINER'S COMMENT

1.1 When preparing this Office action the examiner considers the instant application to include:

A) the Oath/Declaration filed on 23 August 2004 which is acceptable to the examiner;

B) the Abstract filed on 23 August 2004 which is acceptable to the examiner;

C) figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 & 26 of the set of drawings containing 26 sheets of 26 figures comprising figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 & 26 as presented in the set of drawings filed on 30 July 2009 where the content of figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 & 26 of the above set of drawings is acceptable to the examiner;

D) the Substitute written description as filed on 30 July 2009; and

E) the set of claims as filed on 30 July 2009.

1.2 Applicant's claim for the benefit of an earlier filing date pursuant to 35 U.S.C. 119(e) is acknowledged.

1.3 The examiner has approved the proposed changes to figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 & 26 of the drawings as filed on 30 July 2009.

2. OBJECTIONS TO THE DRAWINGS

2.1 The drawings filed on 30 July 2009 are objected to because:

A) although the written description mentions a small fraction of the features of the invention that have been depicted in figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 & 19 as presented in the set of drawings filed on 30 July 2009, the written description does not provide an adequate written description of the drawings since there are features of the invention depicted in the drawings that do not have a corresponding description within the written description. In view of this, it is unclear how figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 & 19 as presented in the set of drawings filed on 30 July 2009 that depict undisclosed features of the invention would in fact aid one of ordinary skill at the time the invention was made in understanding the

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invention as required by 37 CFR 1.81(a). To help solve this problem, the examiner suggest the use of reference numbers in the figures and then a corresponding reference to each reference number in the written description as the number is described, note the requirements of 37 CFR 1.84(p(4,5)) and 37 CFR 1.84(q).

B) the drawings fail to comply with 37 CFR 1.84(p)(5) because they do not include the following reference legend that has been mentioned in the written description, note reference legend 310 which has been mentioned in the written description of figure 18 located in the paragraph at page 34, lines 3-8: "For the T-Square ... point 310 greater than 90 degree. See Fig. 18" of the written description and note the corresponding objection to the disclosure.

2.1.1 Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### 3. OBJECTIONS TO THE WRITTEN DESCRIPTION

3.1 The disclosure is objected to because of the following informalities:

A) the following errors and/or inconsistencies between the drawings filed on 30 July 2009 and the written description have been noted:

(1) although the written description mentions a small fraction of the features of the invention that have been depicted in figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 & 19 as presented in the set of drawings filed on

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30 July 2009, the written description does not provide an adequate written description of the drawings since there are features of the invention depicted in the drawings that do not have a corresponding description with in the written description. In view of this, it is unclear how figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 & 19 as presented in the set of drawings filed on 30 July 2009 that depict undisclosed features of the invention would in fact aid one of ordinary skill at the time the invention was made in understanding the invention as required by 37 CFR 1.81(a). To help solve this problem, the examiner suggest the use of reference numbers in the figures and then a corresponding reference to each reference number in the written description as the number is described, note the requirements of 37 CFR 1.84(p(4,5)) and 37 CFR 1.84(q).

(2) the written description fails to comply with 37 CFR 1.84(p)(5) because the written description does include an explicit reference to the following reference legends, note reference legend 310 which has been mentioned in the written description of figure 18 located in the paragraph at page 34, lines 3-8: "For the T-Square ... point 310 greater than 90 degree. See Fig. 18" of the written description.

B) the substitute written description filed on 30 July 2009 is unclear because at the following locations of this document the ".", that functions to indicate the end of the paragraph or sentence is missing, see at least:

- (1) at page 1, line 20: "... Portal Website";
- (2) at page 14, line 21: "... GML";
- (3) at page 16, line 4: "... object";
- (4) at page 17, lines 9 & 12: "... Random";
- (5) at page 18, line 6: "... random";
- (6) at page 19, line 15: "... GML";
- (7) at page 20, line 13: "... used";
- (8) at page 24, line 4: "... (GML)";
- (9) at page 24, line 18: "... map position";

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- (10) at page 25, line 3: "... symbology";
- (11) at page 26, line 5: "... mapping level");
- (12) at page 29, line 3: "... capabilities";
- (13) at page 30, line 6: "... integration";
- (14) at page 30, lines 13-14: "... services See Fig. 13";
- (15) at page 31, line 10: "... random sampling";
- (16) at page 32, line 10: "... Fig. 16");
- (17) at page 33, line 3: "... Method";
- (18) at page 34, line 3: "location. See Fig. 17"; and
- (19) at page 34, line 8: "degree. See Fig. 18".

3.1.1 Appropriate correction is required.

#### 4. 35 U.S.C 101 REJECTIONS

4.1 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4.1.1 Claims 1-22 & 40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4.1.1.1 It is noted that one of ordinary skill at the time the invention was made would fairly and reasonably recognize that the disclosure presents a disclosed substantial and credible utility for the invention of:

A) process/method claims 1-12 as a process/method comprising a sequence of steps/actions to perform functions that when taken as a whole provide the useful and beneficial function of generating a "spatially-stratified random sample";

B) machine/system/apparatus claims 13-22 as a machine comprising one or more structures to perform functions that when taken as a whole achieve the useful and beneficial function of generating a "spatially-stratified random sample"; and

C) process/method claim 40 as a process/method comprising a sequence of steps/actions to perform functions that when taken as a whole provide the useful and

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beneficial function of using a geographical information system to assess the population with in a study area.

4.1.1.2 It is further noted that one of ordinary skill at the time the invention was made would fairly and reasonably recognize that as recited/implied by the claims, the invention of:

A) claims 1-12 when taken as a whole are directed to a process/method that is intended to achieve the claimed utility of generating a “spatially-stratified random sample”;

B) claims 13-22 when taken as a whole are directed to a machine that is intended to achieve the claimed utility of generating a “spatially-stratified random sample”; and

C) claim 40 when taken as a whole is directed to a process/method that is intended to achieve the claimed utility of using a geographical information system to assess the population with in a study area.

4.1.1.3 In regard to each of the pending claims while taking each claim as a whole and interpreting the claims as the claims could fairly and reasonably be interpreted by one of ordinary skill at the time the invention was made as guided by the written description, it is noted that one of ordinary skill at the time of the invention could fairly and reasonably make the following observations in regard to the interpretation of each of the pending claims.

4.1.1.3.1 In regard to the recited utility of independent/base claims 1, 13 & 40, it is noted that one of ordinary skill at the time the invention was made would fairly and reasonably recognize that these claims recite a non-limiting intended field of use/utility for the invention recited as a method in claim 1 and as a machine in claim 13 that provides the functions of generating a “spatially-stratified random sample” for rapidly assessing population growth, and in claim 40 that provides the function of using a geographical information system to assess the population with in a study area.

4.1.1.3.2 In regard to the limitations of independent/base claims 1, 13 & 40, it is noted that as one of ordinary skill at the time the invention was made would fairly and reasonably interpret:

A) the functions that are performed by each of the actions of the process claims 1 & 40 and each of the structures recited in machine claim 13 as being a positive recitation of an action/structure that does not go beyond being an action/structure that merely uses an unspecified machine/process in order to perform data/information gathering and

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processing functions on data/information that has been gathering in an unspecified manner and then is processed by the claimed invention, where the gathered and processed data/information is to represent a physical locations”, since as recited the data/information that is gathered/produced by the performing the recited functions (1) is not positively recited as being provided as input for use by latter processing that is positively recited as being performed either internally or externally of the recited invention; and (2) is not positively recited as being processed/gathered by any specific machine or process that would be interpreted by one of ordinary skill at the time the invention was made as positively performing any other function beyond the function recited as data/information gathering/processing.

From the above, it is further noted that one of ordinary skill at the time the invention was made would fairly and reasonably recognize that the claimed invention when taken as a whole fails to positively recite:

A) the use of a specific machine/process in order to perform any of the data/information gathering and/or processing functions recited as the claimed invention; or

B) that the resultant data/information that is produced by the positively recited data/information gathering and processing is required to be: (1) known by anyone or anything, or (2) applied by anyone or anything, or (3) used in any manner by anyone or anything as part of the claimed invention; or

C) a transformation of the initially gathered data/information into a different state or thing other than a different representation of the initially gathered and processed data/information.

Hence, one of ordinary skill at the time the invention was made could fairly and reasonably interpret claims 1, 13 & 40 when taken as a whole as being directed to nothing more than a machine/process that does not go beyond the abstract concepts of gathering and manipulating of data/information with out either: (1) performing a transformation of the collected and data/information into something other than data/information, or (2) requiring a claimed practical application of the results of the gathering and manipulation of data/information, or (3) claimed requirement that any of the recited structures or actions are present or would perform any



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function for any purpose not related to the manipulation of data/information, or (4) claimed requirement that any of the recited structures or actions are performed or implemented using a specific machine/process. In view of this the claimed subject matter would preempt any and all uses of the claimed invention or any and all variations of how the claimed invention may be implemented.

4.1.1.3.3 The invention recited in claims 1-22 & 40 recites an action/structure that one of ordinary skill at the time the invention was made would fairly and reasonably recognize as implying the performance of the function of outputting, for example displaying, the results of some of the processing of claims to an operator/user by using the phrase “displaying ... .”. However, this recitation is deemed to be an insignificant concrete and tangible practical application of the result of the processing recited in these claims because one of ordinary skill at the time the invention was made would fairly and reasonably recognize the claimed invention fails to positively require that the displayed data/information be used in any manner to achieve the utility of the invention. As set forth above one of ordinary skill at the time the invention was made could fairly and reasonably interpret claims 1-22 & 40 as being directed to nothing more than a process/machine that is directed to a process/machine comprising nothing more than actions and structures that function to provide:

A) insignificant data/information gathering since the actions/structures as recited in the claims are merely directed to nothing more than performing the function of gathering data/information for use in the processing that is later recited in the claim, see In re RICHMAN, 195 USPQ 340 at 344 (CCPA 1977);

B) insignificant data/information processing, since the actions/structures as recited in the claims are merely directed to nothing more than performing the function of processing the gathered but fails to positively recite a concrete and tangible application of the results of the processing, see In re WARMERDAM, 31 USPQ2d 1745 at 1758-1759 (CAFC, 1994), and STATE STREET BANK AND TRUST CO. v SIGNATURE FINANCIAL GROUP INC., 38 USPQ2d 1596 at 1602 (CAFC 1998); and

C) the presentation of the results, since the actions/structures as recited in the claims are merely directed to nothing more than performing the function of displaying the

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gathered and/or processed data/information with out positively reciting any requirement that the results of the processing be used by anyone or anything.

In view of the above fact situation of the applied Court precedent, it is noted that when considering the same fact situation as set forth above in regard to the claimed invention the Court has determined that a claim that is directed to nothing more than the abstract idea of collecting data/information and/or processing data/information and/or displaying/presenting the results of the gathering and processing of data/information to an user/operator is non-statutory, see (A) claim 5 of In re ABELE and MARSHALL, 214 USPQ 682 at 688 (CCPA 1982), which recited data/information processing and then displaying/presenting of the results of the data/information processing to an user and which the Court held was to be directed to non statutory subject matter; and (B) whereas a claim that collected, processed, and then used the results of the processing to perform another task outside of the processing by applying the results of the recited processing to perform another function in DIAMOND v. DIEHR AND LUTTON, 209 USPQ 1 at 11 (US SupCT, 1981), was held by the Court to be directed to statutory subject matter. Hence, the mere displaying of the results of processing as recited in the pending claims is deemed to not provide a concrete and tangible result for the results of the processing that is recited in the claims.

4.1.1.3.4 Regarding the additional subject matter recited as dependent claims 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21 & 22, it is noted that as one of ordinary skill at the time the invention was made would fairly and reasonably interpret the claimed subject matter as being directed to both (A) nonfunctional descriptive material that does not go beyond merely defining the nature/source of the recited data/information that is to be used when performing the recited processing; and/or (B) functional descriptive material that does not go beyond defining the nature of the steps/actions that are used when performing the recited functions of processing or gathering of data/information and hence does not alter the statutory nature of the invention recited as the invention in the base claims.

4.1.1.3.4 As a final note in view of In re BILSKI, 88 USPQ2d 1385 (CAFC 2008), as the Examiner has argued above, the claimed invention merely sets forth an unspecified type of machine or process or article that does not go beyond performing the function of abstractly manipulating data/information with out being tied to using any other statutory class of invention or performing a transformation from one state or thing in to another state or thing, and hence the

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claimed invention would in fact preempt any and all uses of the underlying principle of the claimed invention.

5. RESPONSE TO APPLICANT'S ARGUMENTS

5.1 The objections and rejection that have not been repeated here in have been over come by applicant's last response.

5.2 In regard to the repeated objections to the drawings and written description as set forth above by the Examiner.

5.2.1 It is noted that applicant's response still does not provide a clear one to one correspondence between each of the depicted features of the invention as illustrated in figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 & 19. As indicated by the requirements that the drawing must be consistent with the written description as required by 37 CFR 1.84 and required to illustrate the claimed subject matter 37 CFR 1.83(a) in such a manner that will tend to aid one of ordinary skill at the time the invention was made in the understanding of the claimed invention 37 CFR 1.81(a).

5.2.2 In regard to the new objection to figure 18, this objection was generated due to applicant's amendment.

5.2.3 In regard to the new objection to the written description, which this objection applies to the written description filed 23 February 2004, applicant's amendments to the written description as filed 30 July 2009 more clearly highlighted the missing punctuation.

5.3 In regard to the rejection of claims 1-22 & 40 under 35 U.S.C. 101, applicant's arguments are deem non persuasive and this rejection has been maintained in view of the respective modified rejection as set forth above and the following considerations.

5.3.1 The examiner asserts that any claim must be interpreted from the perspective of one of ordinary skill at the time the invention was made so that that the true scope and meaning of the claimed invention when taken as a whole may be fairly and reasonably interpreted and determined, see, In re CORTRIGHT, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999), and that the written description only provides guidance as to what a word or phrase is intended to mean so that fair and reasonable equivalents may be determined, see , In re MORRIS, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). However, there is a strict prohibition against importing any subject matter from the written description in to the

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claims unless the claimed invention explicitly recites that subject matter, see In re PRATER AND WEI, 162 USPQ 541 at 551 (CCPA 1969) “We are not persuaded by any sound reason why, at any time before the patent is granted, an applicant should have limitations of the specification read into a claim where no express statement of the limitation is included in the claim.”.

5.3.2 Further examiner asserts that from the perspective of one of ordinary skill at the time the invention was made 35 U.S.C. 101 requires a claimed invention to be new and useful. Further, from the perspective of one of ordinary skill at the time the invention was made for either a disclosed invention or claimed invention to be useful, then all of the structures or action recited as the invention, disclosed or claimed, must be set forth as an explicitly recited series of one or more operative structures or actions, In re MUSGRAVE, 167 USPQ 280 at 289-290 (CCPA 1970), that will operatively cooperate as a whole single invention in order to achieve a single credible and substantial utility for the invention, In re MAYHEW, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). This requirement for the claimed invention as a whole to operate as a single invention is necessary because without these cooperative interactions, then the invention as a whole would not be a proper process/machine under the statute, In re SARKAR 200 USPQ 132 at 136 (CCPA 1978).

5.3.3 Therefore, in view of the discussion, regardless of any structures or actions that may be disclosed in the written description as the invention or any cooperative interaction between the structures or actions of the disclosed invention or any functionality of the disclosed invention or operativeness of the disclosed invention or utility of the disclosed invention that may be set forth within the written description, unless one of ordinary skill at the time the invention was made would fairly and reasonably recognize that a structure or action or interaction or functionality or operativeness or utility are clearly set forth in the claims as being part of the claimed invention, then these structures or actions or functionality or operativeness or utility CAN NOT BE ATTRIBUTED TO THE CLAIMED INVENTION, In re PRATER AND WEI, 162, supra.

5.3.4 The examiner contends that, based on the above, although it is conceivable that one of ordinary skill may know of many different structures or actions that would usefully and beneficially be operative in order to achieve the positively recited functions for the structures and actions positively recited as being part of the claimed invention, since one of ordinary skill at the

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time the invention was made would fairly and reasonably interpret the language used to describe the claimed invention as:

A) failing to positively recite the antecedent structures or antecedent actions that one of ordinary skill at the time the invention was made would have fairly and reasonably recognized as being require to achieve any function then these missing antecedent structures or actions may not be attributed to the claimed invention; and

B) failing to positively recite the actual structures or actions that are to be used as part of the claimed invention, then one of ordinary skill at the time the invention was made would have recognized that any type of structure or action that would achieve the recited function could be used without being limited to the disclosed structures and/or actions that are not recited and therefore may not be attributed to the claimed invention.

Then, it can clearly be seen from the above that the scope and meaning of the claimed invention when fairly and reasonably interpreted and determined by one of ordinary skill at the time the invention was made would include the use of any structure or any action that from the perspective of one of ordinary skill at the time the invention was made would be fairly and reasonably interpreted as performing the corresponding functions that have been recited as being part of the claimed invention, regardless of the perspective of what applicant intends to be the scope and meaning of the claimed invention.

5.3.5 Applicant argues that because claims 1-22 & 40 recite the use of a display, then these claims are directed to subject matter that defines a “statutory machine/process” and therefore are statutory are non persuasive since this argument clearly misses the point of the rejection.

5.3.5.1 This argument clearly misses the point of the Examiner’s rejection because the Examiner asserts that the Examiner’s rejection clearly sets forth that one of ordinary skill at the time the invention was made would fairly and reasonably recognize that the claimed invention is directed to subject matter that does not go beyond the abstract ideal of processing or manipulating excluded subject matter, that is the abstract idea of processing or manipulating data/information that merely represents one or more numbers into other data/information that still represents one or more numbers, see GOTTSCALK v BENSON ET AL, 175 USPQ 673 (US SupCT, 1972) and PARKER v FLOOK, 198 USPQ 193 (US SupCT, 1978), at pages 7-8.

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5.3.5.2 Further, the Examiner asserts that the Examiner's rejection clearly sets forth that one of ordinary skill at the time the invention was made would fairly and reasonably recognize that the claimed invention is directed to subject matter that does not go beyond the abstract ideal of processing or manipulating excluded subject matter, that is the abstract idea of processing or manipulating data/information, because the claimed invention lacks any explicit recitation within the claims that the claimed invention would be fairly and reasonably recognized by one of ordinary skill at the time the invention was made as:

A) providing a credible concrete and tangible substantial useful application of the results of the claimed manipulation of excluded subject matter, see In re WARMERDAM, 31 USPQ2d 1745 at 1758-1759 (CAFC, 1994) and STATE STREET BANK AND TRUST CO. v SIGNATURE FINANCIAL GROUP INC., 38 USPQ2d 1596 at 1602 (CAFC 1998); or

B) going beyond merely reciting a particular field of use for the claimed manipulation of excluded subject matter, see DIAMOND v. DIEHR AND LUTTON, supra; or

C) going beyond merely reciting insignificant activity after the manipulation of excluded subject matter, see DIAMOND v. DIEHR AND LUTTON, supra; or

D) going beyond merely reciting insignificant activity that as claimed would only provide data/information to the claimed manipulation of excluded subject matter, see In re RICHMAN, 195 USPQ 340 at 344 (CCPA 1977); or

E) requiring the use of any type of machine, process or article or composition of matter when performing any of the claimed functions, see In re Bilski, 88 USPQ2d 1385 (CAFC 2008);

F) requiring the use of any type of transformation from one state or thing into another state or thing, see In re Bilski, supra;

5.3.5.3 Where in this regard it is noted that the Court has:

A) held the displaying of the results of a manipulation of excluded subject matter as being an insignificant activity after the manipulation, note claim 5 which displayed the results of a manipulation of excluded subject matter was held to be non-statutory, see In re ABELE and MARSHALL, 214 USPQ 682 at 688 (CCPA 1982);

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B) has held that the manipulation of numbers into other numbers is not a transformation, see GOTTSCHALK v BENSON ET AL, supra; and

C) held that any machine or process that does go beyond the manipulation of excluded subject matter is directed to non statutory subject matter, see In re MAUCORPS, 203 USPQ 812 @ 815-816 (CCPA 1979) and In re JOHNSON, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) and In re FREEMAN, 573 F.2d at 1247, 197 USPQ at 472.”.

5.3.5.4 Since the claimed fail to recite a requirement that the displayed data/information be used or applied in any manner, then the claimed display of data/information is like the display of data/information held to be non-statutory in see In re ABELE and MARSHALL, supra. In view of the above and the fact that Applicant’s arguments do not address the Examiner’s position that the claimed invention is directed to excluded subject matter, then Applicant’s arguments are deemed to be non-persuasive and this rejection is maintained by the Examiner.

## 6. REASONS FOR ALLOWANCE

6.1 The following is a statement of reasons for the indication of allowable subject matter over the prior art:

A) however, the prior art does not fairly teach or suggest in regard to claims 1 & 13 a process in claim 1 and a machine in claim 13 that provides the useful and beneficial function of using a spatially-stratified random sample to rapidly assess a population by providing actions in claim 1 and structures in claim 13 that perform at least the functions of:

(1) creating a systematic grid for a study area, where the grid is defined using a given number of target grid points;

(2) dividing each grid cell into a series of sub-grid cells that are identified from top to bottom and from left to right with in each grid cell;

(3) identifying the sub-grid of cells that intersect the study area;

(4) listing of the identified sub-grid of cells that intersect the study area in the same order/sequence as the grid cells and sub-grid cells;

(5) dividing the sub-grid lists into one or more sections, where each section of the sub-gird list has a substantially equal number of sub-grid cells and

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the number of sections of sub-lists equals the given number of target grid points;  
and

(6) obtaining a “spatially stratified random sample” by randomly selecting a sub-grid cell from each section of the sub-grid listing.

Claims 2-12, which depend from claim 1, and claims 14-22, which depend from claim 13, are allowable over the prior art for the same reason.

B) however, the prior art does not fairly teach or suggest in regard to claims 23 & 27 a process in claim 23 and a machine in claim 27 that provides the useful and beneficial function of rapidly assess a population by providing actions in claim 23 and structures in claim 27 that perform at least the functions of:

- (1) determining a boundary of a study area;
- (2) selecting a population estimation methodology for use on the study area;
- (3) assigning field data/information collectors to areas within the study area;
- (4) collecting field data/information from the assigned field data/information collectors;
- (5) uploading/transferring the collected field data/information to a computer;
- (6) using the computer to prepare/determine a dynamic population estimate/prediction;
- (7) using the dynamic population estimate to make resource analysis calculations and geographic assignments;
- (8) uploading the determined resource analysis calculations and geographic assignments to the Internet for remote viewing; and
- (9) using the uploaded resource analysis calculations and geographic assignments to distribute supplies.

Claims 24-26, which depend from claim 23, and claim 28, which depends from claim 27, are allowable over the prior art for the same reason.



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C) however, the prior art does not fairly teach or suggest in regard to claim 29 a process in claim 29 that provides the useful and beneficial function of using a spatially-stratified random sample to rapidly assess a population by providing actions in claim 29 that perform at least the functions of:

(1) loading at least one of “satellite imagery” and “aerial imagery” of a study area into a geographical information system (GIS);

(2) demarcating the dwellings contained within the “satellite imagery” that has been loaded into the GIS;

(3) applying a spatially stratifying sampling procedure with a predetermined estimate;

(4) simulating a distance measurement procedure based on a selected population estimate method on top of the at least one satellite imagery and aerial imagery;

(5) guiding an user to determine mouse insertion points by displaying reference lines and point based on the selected population estimation method;

(6) computing distance measurements from the insert mouse input points for the selected population estimation method;

(7) prompting the user to enter data/information in order to increase productivity for distance measurements and data/information collection; and

(8) ascertaining an overall population within the study area based on the applied spatially stratifying sampling procedure.

Claims 30-32, which depend from claim 29, are allowable over the prior art for the same reason.

D) however, the prior art does not fairly teach or suggest in regard to claims 33 & 40 a machine in claim 33 and a process in claim 40 that provides the useful and beneficial function of using a spatially-stratified random sample to rapidly assess a population by providing structures in claim 33 and actions in claim 40 that perform at least the functions of:

(1) loading “satellite imagery” for a study area into a geographical information system (GIS);

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(2) demarcating the dwellings contained within the "satellite imagery" that has been loaded into the GIS;

(3) applying a spatially stratifying sampling procedure with a predetermined estimate; and

(4) ascertaining an overall population within the study area based on the applied spatially stratifying sampling procedure.

Claims 33-39, which depend from claim 33, are allowable over the prior art for the same reason.

7. CONCLUSION

7.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward R. Cosimano whose telephone number is 571-272-0571. The examiner can normally be reached on 571-272-0571 from 7:30am to 4:00pm (Eastern Time).

7.2 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7.3 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ERC  
11/25/2009

**/Edward Cosimano/  
Primary Examiner Unit 2863**